SRI International

CANADIAN HIGH COMMISSION

SECTORAL ANALYSIS - BRUNEI TELECOMMUNICATIONS INDUSTRY

March 1990

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Regional Headquarters

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SECTORAL ANALYSIS - SINGAPORE TELECOMMUNICATIONS INDUSTRY

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The Canadian High Commission in Singapore, Commercial Section, commissioned SRI International to prepare this sectoral analysis overview. This report is designed to help Canadian organizations meet their initial information needs regarding participation in this sector in Brunei. The information presented is believed to be accurate and from sources SRI believes to be reliable. Readers are urged to verify pertinent information before committing resources.

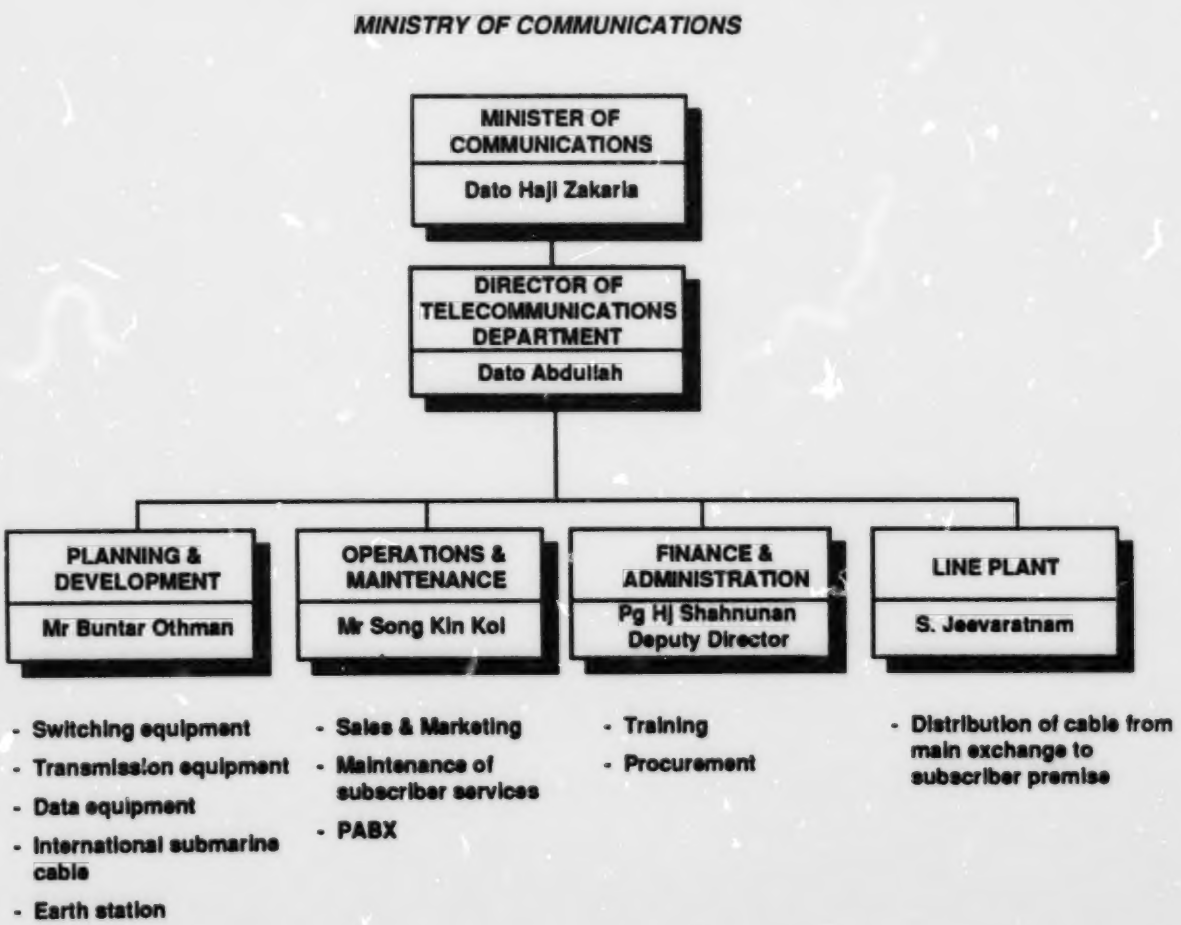
BACKGROUND

DIRECTIONAL EMPHASIS OF SECTOR

One of the requirements for rapid economic development in Brunei is a reliable and efficient communications network. The focus of Jabatan Telekom Brunei (JTB) which acts as the telecommunications department is to enhance international communication links, upgrade national telecommunications services and develop sound financial and management control of telecommunications operations.

JTB, which falls under the Ministry of Communications, administers the entire telecommunications sector. They are responsible for capital equipment procurement, systems operations, equipment maintenance, and the leasing of various telecommunications equipment (not including facsimile machines).

MINISTRY OF COMMUNICATIONS - ORGANIZATION CHART



Source: Telecommunication Department

DIRECTIONAL EMPHASIS OF SECTOR ...

The 6th Development Plan (1991-1994) will continue to focus on the basic telephone infrastructure. In 1988, international and internal telephone calls (outbound and originating) were 10 million. Other services to be added in 1990 include telephones, cellular mobile telephones, facsimile, telex, country wide paging and rural radios.

Presently, there are 29,902 direct telephone lines. A B$35 (C$1 : B$1.55) million digital switching project has been purchased from Siemens to increase the country's automatic telephone lines to 47,000. Of 11 anticipated systems, half are now in operation.

International communications will be expanded with the implementation of the AT&T international gateway exchange to be fully operational by year-end. A B$2 million packet switching network system should also be fully installed by the end of 1990. This exchange will facilitate more sophisticated communications such as Electronic Mail and Videotex.

Since 1983, the government has also liberalized the sale of facsimile machines to the domestic market. There are indications that the government will liberalize the sale of cellular mobile telephone, pager equipment and telephones within the year.

There are two satellite earth stations at Telesai - a B$12 million station established in 1979 and a second station built in 1983. Both stations provide international and national direct telex and telephone facilities with access to 160 countries and work via the Pacific Ocean Satellite.

Memorandums of understanding have been signed by Brunei with Singapore and the Philippines for multi-million dollar submarine cable projects. Two cables will link Brunei with Singapore and and Malaysia and with the Philippines. With the system design now complete, both cable projects should be completed by early 1992.

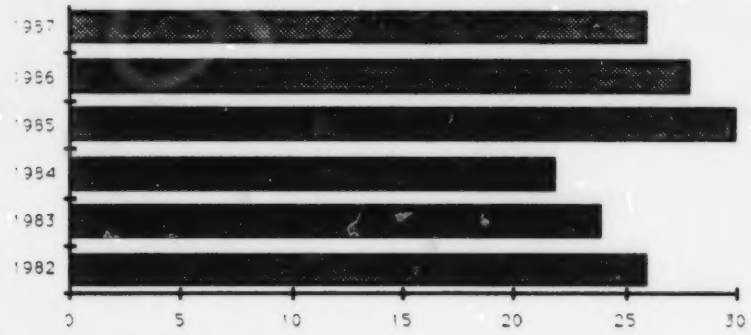
ECONOMIC OVERVIEW

The telecommunications market in Brunei is comprised of two categories. Capital equipment refers to government capital expenditure on large projects such as Analogous and Digital Switching Equipment. Terminal equipment includes major equipment such as telephone sets, cellular mobile telephone sets, pagers, Private Branch Exchanges (PABX) and facsimile machines.

Under the 4th Plan (1980 -1984) transport and communications were allocated B$408 million of which telecommunications received approximately 20% (B$84 million), the second largest allocation after the road construction. The 5th Plan (1986-1990) development allocations for transport and communications is B$323 million of which JTB has received 10%. The decrease in the telecommunications allocation is due to a reduction of the total 5th Year Plan budget which affected various departments including education and fisheries.

Since 1980, a total of over B$159 million in development funds has been spent to upgrade the system.

GOVERNMENT EXPENDITURE FOR TELECOMMUNICATIONS *



Source : Brunei Statistical Yearbook

* Recurrent Department Expenditure

CURRENT SITUATION

The average percentage of investments in public telephone equipment is as follows: plant for local networks (30%), exchanges (29%), long distance trunks (23%), subscriber's plant (10%), buildings and land (8%).

Between 1982-1989, the market size for telecommunications equipment was B$167 million. For the same period, Brunei imported B$6.9 million of telecommunications equipment from Canada.

The bulk of expenses between 1982-1989 was spent on switching equipment, PABX and CMTs. Capital equipment expenditures in order of largest dollar value, are PABX, CMTs, subscriber sets, radio and transmission equipment and cables.

IMPORTED TELECOMMUNICATIONS EQUIPMENT
1982-1989

EQUIPMENT	*CANADA*	*GERMANY*	*JAPAN*	*USA*
Subscriber Set			7,766,591	102,786
PABX	1,892,814		16,955,788	3,334,466
Mobile Phone	3,205,769			
Data		4,665,477	3,066,593	
Radio/Transmission			2,268,765	
Switching		35,325,948	16,525,939	16,901,255
CMTS				15,666,565
Radio Paging			5,058,031	
Cable			2,562,252	
Computer				2,098,504
Rural Radio				1,607,293

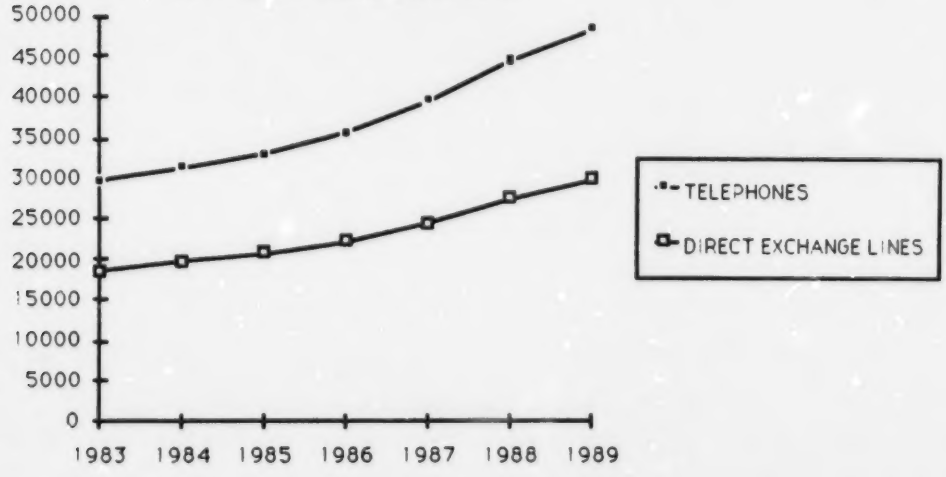
Source : Brunei Telecommunications Department

DEMAND FOR CAPITAL EQUIPMENT

Telephone Sets

The demand for telephones has increased steadily. Since 1980, the number of telephones has been growing by 10% per annum. To date, there are 48,561 telephones installed in Brunei, or 19 per 100 people. The aim is to raise this to 32 per hundred by 1990. Currently in Brunei telephones have to be rented from JTB. There are indications, however, that the department will open sales to the private sector within the year.

DEMAND FOR TELEPHONE SETS



Source : Brunei Telecommunications Department

Mobile Telephones and Paging Systems

Cellular mobile radio operations began in February 1989. The mobile service is connected to the public automatic telephone service. There are plans to provide remote areas, where it is not economical to lay telephone cables, with cellular mobile radio communication. Of a total of 9 expected base stations, 8 are now operational. The subscriber base is up to 550 now.

Currently, high subscriber rates and government control of radio frequency are seen to be inhibiting demand. However, demand for mobile telephone sales will increase with Brunei Telecom's pending relaxation of mobile telephone sales by the private sector. The Ministry predicts a demand of 10,000 cellular mobil telephones within the next 5-7 years.

The base station for a country wide paging system will be in operation by early 1991. There also are plans to open the sale of subscriber pagers to private companies.

BACKGROUND ...

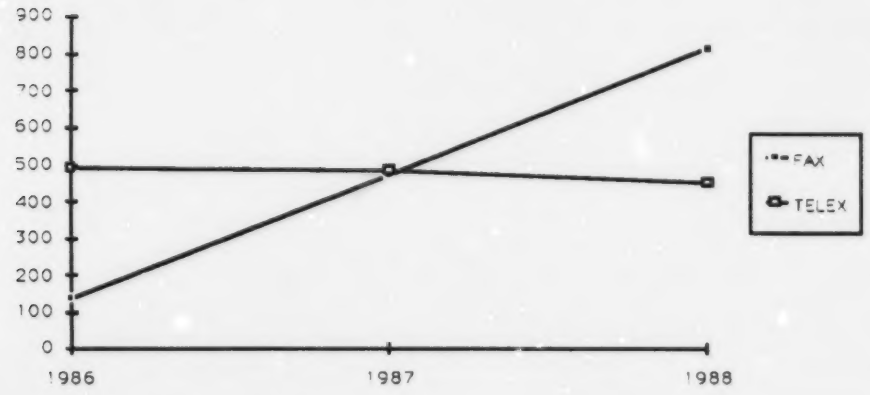
CURRENT SITUATION ...

DEMAND FOR TERMINAL EQUIPMENT ...

Telex and Facsimile

In recent years, the demand for facsimile services has overtaken telex. Between 1986 and 1988, telex traffic minutes have dropped approximately 36%. Telex subscribers have dropped from 490 to 448 for the same period. Facsimile subscribers, for the same period, have increased nearly eight-fold from 139 to 816 subscribers. Demand for facsimile services is expected to remain strong.

FACSIMILE AND TELEX SUBSCRIBERS



Source : Brunei Telecommunications Department

FUTURE TRENDS

JTB will focus on upgrading the international and local exchanges. 30% of market demand for direct telephone lines remains unsatisfied. For the local exchanges, JTB will continue to procure capital equipment and replacement parts.

Following the installation of the AT&T international gateway, JTB will be interested in procuring enhancements for the system.

The installation of the Packet Switching Network by year-end will open sales and service opportunities for more advanced communications services such as teleconferencing, electronic mail and videotex.

The government encourages private companies to tender for external and internal planning projects. and also seeks consulting services in network development, technical training for operations and maintenance services.

COMPETITOR ANALYSIS

KEY PARTICIPANTS IN THE TELECOMMUNICATIONS INDUSTRY

All telecommunication equipment used in Brunei is imported. The top three country suppliers are Japan, the US and Germany. Between 1982-1989, Japan had the leading share of total imports, B$54 million (32%), followed by West Germany and the USA with B$40 million and B$39 million respectively. In addition, a large percentage of equipment is imported to Brunei from supply agents located in Singapore.

Japan and Germany have supplied the bulk of switching equipment, telephone sets and certain telephonic apparatus. Parts of telegraphic apparatus are sourced mainly from Malaysia. The US is the largest supplier of navigational products.

Capital equipment contracts are awarded by Brunei Telecom to leading suppliers with international reputations and tried and tested systems. Such suppliers have included AT&T, Motorola (USA), NEC, Fujitsu, Toshiba (Japan), Philips (Singapore), Samacon (France), Autelec (Switzerland), British Telecoms, Cable and Wireless (UK), Siemen (Germany), and Ericsson (Sweden).

The projects awarded to foreign suppliers have included :

- a B$5.2 million paging system awarded to Siemens in 1985.
- a B$8 million Cellular Mobile Telephone Exchange awarded to Motorola in 1988.
- a B$4.5 million contract to supply fibre optics cable for interexchange connections with Marconi (Italy).
- B$17 million tender for an International Telephone Exchange awarded to AT&T.
- Philips (Singapore) has provided the country with radio links and subscriber radio equipment.

In 1980, NEC supplied an analog electronic telephone exchange with a capacity of 27,000 lines. In 1986, Siemens supplied an 11 unit digital telephone switching exchange to provide an additional capacity of 5000 telephones. Currently, half of the units have been implemented and are in operation.

Canadian participants between 1977 and 1982 included :

- SR Telecom Canada which supplied 5 microwave telephone systems (B$3.5 million)
- Mitel which supplied the government some Private Automated Branch Exchanges (PABX)
- Alberta Government Telephone (AGT) which supplied 1,200 cellular mobile phone units (B$2 million)

More recently, Canadian suppliers, Northern Telecom and Mitel, have submitted tenders including national switching equipment and PABX, respectively.

KEY CUSTOMERS IN THE SECTOR

In Brunei, the government (e.g. Ministry of Telecommunications, the Police Force) and Brunei Shell (50% private, 50% Brunei government) procure 95% of the country's telecommunications equipment. The private sector purchases the remainder. Customers also include residential and commercial consumers.

CURRENT MARKETING TRENDS

Telecommunications tender notices appear on Wednesdays in "*Pelita Brunei*", the government newspaper. For large projects, companies should contact the Director of Telecommunications directly. Equipment supplies such as pipes, cables and wires can be handled through local agents.

INDUSTRY INCENTIVES AND REGULATIONS

GOVERNMENT REGULATIONS

There is no duty on imported industrial equipment purchased by the government. There is a 20% import duty on all office equipment.

LOCAL PREFERENCE POLICY

Brunei allows 100% foreign ownership. The Brunei government encourages joint ventures with local companies. Local equity participation can be of considerable assistance when tendering for contracts with the Government or Brunei Shell Petroleum.

SECTORAL ANALYSIS - BRUNEI TELECOMMUNICATIONS INDUSTRY

APPENDICES
March 1990

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Southeast Asia & South Pacific
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KEY BUSINESS AND GOVERNMENT CONTACTS

APPENDIX I

GOVERNMENT AGENCIES IN BRUNEI

Economic Development Board
Ministry of Finance
Bandar Seri Begawan 2012
Negara Brunei Darussalam
Telephone : (02) 41991

Ministry of Industry and Primary Resources
Bandar Seri Begawan 1220
Brunei Darussalam
Negara Brunei Darussalam
Telephone : (02) 44822
Contact :
Pehin Dato Dr Haji Abdul Rahman
- Minister of Industry & Primary Resources

Economic Planning Unit
Ministry of Finance
Bandar Seri Begawan 2012
Negara Brunei Darussalam
Telephone : (02) 41991
Facsimile : (02) 26132
Contact :
Chua Peng Siong - Assistant Director
Datin Lawe - Head

Ministry of Development
Bandar Seri Begawan 1200
Negara Brunei Darussalam
Telephone : (02) 41911
Facsimile : (02) 42298
Contact:
Pengiran Dato Dr Haji Ismail - Minister of Development
Majid Alias - Secretary

Ministry of Communication
Bandar Seri Begawan 1150
Negara Brunei Darussalam
Telephone : (02) 26640
Facsimile : (02) 20445
Contact :
Dato Haji Zakaria - Minister of Communications

Ministry of Defence
Bandar Seri Begawan
Negara Brunei Darussalam
Telephone : (02) 30531
Facsimile : (02) 30395
Contact :
MG Pengiran Haji Ibnu - Deputy Minister
Dato Paduka Haji Mohmd Alimin - Permanent Secretary Administration

Ministry of Education
Old Airport
Bandar Seri Begawan
Brunei Darussalam
Telephone : (02) 41511
Facsimile : (02) 40250
Contact :
Pehin Dato Haji Abdul Aziz -
- Minster of Education

GENERAL BUSINESS ASSOCIATIONS

Brunei Malay Chamber of Commerce and Industry
Suite 411
Bangunan Guru-Guru Melayu Brunei
Jalan Kianggeh
P.O. Box 1099
Bandar Seri Begawan 1910
Telephone : (02) 27297/20649
Telex : BU 2445

Brunei Darussalam State Chamber of Commerce
P O B 2246 Bandar Seri Begawan 1922
Telephone : (02) 28533

Chinese Chamber of Commerce
Room 502-503, Goik Tee Building
66-67 Jalan McArthur
P.O. Box 281
Bandar Seri Begawan 1902
Telephone : (02) 22233

INDUSTRY SPECIFIC DEPARTMENTS

Department of Telecommunications
Telephone House
Jalan Istana Darussalam
Bandar Seri Begawan 2051
Brunei Darussalam
Telephone : (02) 42324
Facsimile : (02) 20445
Contact :
Dato Paduka Awg Jaji Abdullah - Director
S. Jeevaratnam - Senior Executive Engineer

OTHER TAX INCENTIVES ADMINISTERED BY ECONOMIC DEVELOPMENT BOARD

OTHER TAX INCENTIVES ADMINISTERED BY ECONOMIC DEVELOPMENT BOARD

Tax Incentives	Tax Concession
• Pioneer Status	A. Exemption of the 30% corporate tax for a pioneer status company from the day it commences production: Fixed Capital Expenditure — Tax Exemption Period Up to B$250,000 — 2 years B$250,000- B$500,000 — 3 years B$500,000 - B$1 million — 4 years Over B$1 million — 5 years B. Exemption from customs duty on plant, machinery, old equipment installed in the pioneer factory. C. Exemption from import duty on raw materials (not available or produced in Brunei) for production of pioneer products.
• Expansion of established institutions	New Capital Expenditure Requirement : Tax Exemption Pioneer Less than B$258,000 : 3 years Over B$250,000 : 5 years
• Foreign Lenders	Exemption of 20% withholding tax on interest paid to non-resident lenders if ..... • the loan utilized for the purchase of productive equipment • the credit facilities are obtained through financial agreement with the foreign lending company • the amount of loan is not less than B$200,000

IMPORTS OF TELECOMMUNICATIONS EQUIPMENT

IMPORTS OF TELECOM EQUIPMENT INTO BRUNEI (B$'000) (1984 - 1986)			
	1984	1985	1986
Telephonic Apparatus			2,280
Telegraphic Apparatus			201
Other Telephone/Telegraphic Apparatus			2,883
Radio-Telephone/Telegraphic Receivers			378
Electrical Line Parts			3,653
Other Telecom Apparatus			919
Telephone Wire			2,020
Other Sound Recorders & Reproducer Parts			72
Electric Line & Telephone/Telegraphic Apparatus	2,532	3,455	
Other Telecom Apparatus	19,154	2,738	
Plastic Insulated Telephone Wire, Not Submarine	39	180	
Telephone Wire Not Submarine, Insulated, Not Plastic	525	319	

Source: Brunei External Trade Statistics

MAJOR IMPORTERS OF TELECOMMUNICATIONS EQUIPMENT

Brusin Trading Co
A3 Chempaka Shopping Complex
Kg Parit Mile 11/4
Jalan Tutong Bandar Seri Begawan 2684
Contact : Awg Hj Md Tahir P U Kh Hj Umar
Telephone : (02) 24433

B S Syscom (B) Sdn Bhd
c/o Binah Equipment System Sdn Bhd
No 10 Bangunan Menglait 1
Mile 1 1/4 Jalan Gadong BSB 3180
Seri Complex PO Box 522
Bandar Seri Begawan 2605
Contact : Mr Sylvester Yong
Telephone : (02) 26897/40070
Facsimile : (02) 43366

Civil Trading (B) Sdn Bhd
A4 PAP Masn Shopping Complex
Mile 1 1/2 Jalan Tutong Bandar Seri Begawan 2684
Seri Complex PO Box 215 BSB 2602
Telephone : (02) 27657/20566

Elicoms Systems Sdn Bhd
Unit 607, 611, 6th Floor Kompleks Jalan Sultan
51-55 Jalan Sultan, P O Box 2878
Bandar Seri Begawan 7085
Telephone : (02) 41568
Facsimile : (02) 41567
Telex : BU 2706 EIECOM

Interhouse Company
B4 Chempaka Shopping Complex
Mile 1 1/2 Jalan Tutong Bandar Seri Begawan 2684
PO Box 423 BSB 2604
Telephone : (02) 20811/44011

JH Communications Development
No 80 1st Floor
Jalan Roberts BSB 2085
PO Box 2215 Bandar Seri Begawan 1922
Telephone : (02) 41094/41095
Facsimile : (02) 41095
Contact : Ong Jin Huat
Manager